	Application No.	Applicant(a)
	Application No.	Applicant(s)
Notice of Allowability	10/584,492	ORTMANN ET AL.
	Examiner	Art Unit
	Chukwuma O. Nwaonicha	1621
The MAILING DATE of this communication apper All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this ap or other appropriate communication IGHTS. This application is subject t	plication. If not included n will be mailed in due course. THIS
1. This communication is responsive to <u>12/08/2006</u> .		
2. The allowed claim(s) is/are <u>1-18</u> .		
3.  Acknowledgment is made of a claim for foreign priority unappriority and a)  All b)  Some* c)  None of the:		
1. Certified copies of the priority documents have been received.		
2. Certified copies of the priority documents have been received in Application No		
3. Copies of the certified copies of the priority documents have been received in this national stage application from the		
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		
4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.		
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached		
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).		
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.		
Attachment(s)	5 <b>- - - - - - - - - -</b>	
1. Notice of References Cited (PTO-892)	5. Notice of Informal F	
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	6. ☐ Interview Summary Paper No./Mail Da	
3. Information Disclosure Statements (PTO/SB/08),	7. 🗌 Examiner's Amend	
Paper No./Mail Date  4.  Examiner's Comment Regarding Requirement for Deposit	8. 🛭 Examiner's Stateme	ent of Reasons for Allowance
of Biological Material	9.	

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### **DETAILED ACTION**

#### Current Status

1. Claims 18 are pending in the application.

This Application is a 371 of PCT/EP04/52675 10/27/2004.

# **Priority**

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

#### **Allowed Claims**

Claims 1-18 are allowable over the prior art of record.

### Reason For Allowance

The following is an examiner's statement of reasons for allowance: A search of the prior art failed to uncover any reference that anticipates or renders obvious a process for preparing trivalent organophosphorus compounds which bear at least one structural unit of figure 1 as claimed by applicants.

figure 1

The closest prior art is US 2002/0236133. US 2002/0236133 teaches a process of preparing phosphate compounds by reacting phosphorus halides with alcohols or  $\alpha$ -hydroxyarylcarbo-xylic acids in which the halogen atoms on the phosphorus are

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replaced by oxygen groups. Thus a  $\alpha$ -hydroxyarylcarboxylic acid is reacted with a phosphorus trihalide, preferably phosphorus chloride, in the presence of a base to give the product of formula 1 as shown below.

$$R^2$$
 $OH$ 
 $PX_3$ 
 $R^4$ 
 $OH$ 
 $PX_4$ 
 $R^4$ 
 $R^4$ 

Applicants process for obtaining trivalent organophosphorus compounds differ from US 2002/0236133 process in that applicants claim a process that employs a basic ion exchange resin while US 2002/0236133 teaches a process that employed a base (n-butyllithium and lithium phenoxide). The two reactions are in different chemical environment or medium, and require different process conditions. These differences are not readily apparent and would not have been suggested to one of ordinary skill.

## All claims (1-18) are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chukwuma O. Nwaonicha whose telephone number is 571-272-2908. The examiner can normally be reached on Monday thru Friday, 8:30am to 5:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne (Bonnie) Eyler can be reached on 571-272-0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chukwuma O. Nwaonicha, Ph.D.

. Patent Examiner

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Yyonne (Bonnie) Eyler

Supervisory Patent Examiner,

Technology Center 1600